

**REMARKS**

**Summary of the Office Action**

Claims 1, 6, and 12-13 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *Wakai et al.* (USPN 5,327,001).

Claims 3, 4, 8-11 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Wakai et al.* (USPN 5,327,001) in view of *Kaneko et al.* (USPN 6,433,842).

Claim 7 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Wakai et al.* (USPN 5,327,001).

Claim 71 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Wakai et al.* (USPN 5,327,001) in view of *Ha et al.* (USPN 6,620,655) and *Fujikawa et al.* (USPN 6,297,519).

**Summary of the Response to the Office Action**

Applicants have amended claims 1 and 3. Accordingly, claims 1, 3-4, 6-14, and 71 are presently pending.

**The Disposition of the Claims**

Claims 1, 6, and 12-13 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *Wakai et al.* (USPN 5,327,001). Claims 3, 4, 8-11 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Wakai et al.* in view of *Kaneko et al.* (USPN 6,433,842). Claim 7 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Wakai et al.* Claim 71 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Wakai et al.* in

view of *Ha et al.* (USPN 6,620,655) and *Fujikawa et al.* (USPN 6,297,519). Applicants respectfully traverse the rejections for at least the following reasons.

With respect to independent claim 1, as amended, Applicants respectfully asserts that *Wakai et al.* does not teach or suggest a combination including a Ti layer on at least one layer of a gate electrode and source/drain electrodes of thin film transistors as claimed. In accordance with independent claim 1, as amended, the Ti layer can be formed on a gate electrode, source/drain electrodes, and a semiconductor as a masking layer. However, in *Wakai et al.*, the Ti layer is formed on only the semiconductor as an ohmic contact metal layer. That is, in *Wakai et al.*, the Ti layer is not formed on the gate electrode or the source/drain electrodes.

With respect to independent claim 12, Applicants respectfully submit that *Wakai et al.* does not teach or suggest a combination including a metal masking layer as claimed.

Applicants respectfully note that the Final Office Action does not rely on the remaining applied references to disclose these features. Moreover, Applicants respectfully assert that the remaining applied references cannot remedy the above-noted deficiencies.

Accordingly, Applicants respectfully assert that independent claims 1 and 12, as amended, are allowable over the applied art. Moreover, Applicants respectfully submit that dependent claims 3-4, 6-11, 13-14, and 71 are allowable at least because of their respective dependencies from independent claims 1 and 12, as amended, and the reasons set forth above.

With further respect to dependent claims 3, 8, 10, and 14, Applicants respectfully assert that the applied art, whether taken singly or combined, does not teach or suggest a combination

including a TiO<sub>2</sub> masking layer formed in at least one of the thin film transistors or on at least one of the passivation layer and the pixel electrode. In the context of dependent claims 3, 8, 10, and 14, the Final Office Action admits that *Wakai et al.* does not disclose a TiO<sub>2</sub> masking layer. As a result, the Final Office Action further relies on *Kaneko et al.* and asserts that column 8, lines 24-31, of *Kaneko et al.* discloses a TiO<sub>2</sub> masking layer. Applicants respectfully disagree. First, in *Kaneko et al.*, titanium is added to the molybdenum layer to control etch rate of the molybdenum layer (see column 7, line 62, to column 8, line 4), and a titanium oxide serves as a surface conditioner to improved adhesion of the resist used to etch the molybdenum (Mo) layer (see column 8, lines 24-29). That is, *Kaneko et al.* uses a resist as a mask and not the titanium oxide. Thus, the titanium oxide in *Kaneko et al.* cannot be considered to be a TiO<sub>2</sub> masking layer. Second, because the titanium oxide of *Kaneko et al.* is not used as a mask, it lacks a structure such that it has substantially common boundaries with the layer that it masks. (See also Amendment filed November 10, 2005). Thus, Applicants respectfully assert that dependent claims 3, 8, 10, and 14 are further allowable. Here, Applicants respectfully note that the Final Office Action does not rely on the remaining applied references to disclose these features.

**Conclusion**

In view of the foregoing, , Applicants respectfully request entry of the amendments to place the application in clear condition for allowance or, in the alternative, in better form for appeal. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully Submitted,

**MORGAN, LEWIS & BOCKIUS LLP**

Dated: May 23, 2006

By: \_\_\_\_\_



Robert J. Goodell

Reg. No. 41,040

**CUSTOMER NO.: 009629**

**MORGAN, LEWIS & BOCKIUS LLP**

1111 Pennsylvania Avenue, N.W.

Washington, D.C. 20004

Tel: 202-739-3000

Fax: 202-739-3100